

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

GESTURE TECHNOLOGY PARTNERS,
LLC,

Plaintiff,

v.

APPLE INC.

Defendant.

Case No. 6:21-cv-00121-ADA

JURY TRIAL DEMANDED

GESTURE TECHNOLOGY PARTNERS,
LLC,

Plaintiff,

v.

LENOVO GROUP LTD., LENOVO
(UNITED STATES) INC., and MOTOROLA
MOBILITY LLC,

Defendants.

Civil Case No. 6:21-cv-00122-ADA

JURY TRIAL DEMANDED

DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

Despite arguing that no construction is necessary for many of the disputed claim terms, Gesture advances “plain meanings” of the terms that are both inconsistent with their actual plain and ordinary meanings in the context of the claims and improperly geared toward advancing unfounded infringement positions. Because the parties dispute the scope of the claim terms, the Court should construe these terms under *O2 Micro*. Gesture also asks the Court to ignore numerous material defects in the claims that render them indefinite. For instance, Gesture asserts apparatus claims that explicitly require that the device’s camera be oriented to view a user, which necessarily requires a user action to hold the device in a particular way. Such “mixed mode” claims are indefinite under *IPXL*. Gesture also contends that the ambiguous term “forward facing portion”—a term mentioned nowhere outside of the claims—is not indefinite because it refers to “a certain side” even though Gesture’s infringement contentions allege both sides of the accused products are the “forward facing portion.” Gesture’s position does not pass muster. Additionally, with respect to a number of means-plus-function terms, Gesture either incorrectly denies that the terms are in fact means-plus-function terms or stretches to propose a “corresponding structure” that is not actually linked to the recited function.

Defendants’¹ constructions, in contrast, are based on the plain language of the claims and the intrinsic record. For these reasons and those discussed in more detail below, the Court should adopt Defendants’ constructions.

¹ Defendants here refers to defendants Apple Inc., Lenovo (United States) Inc., and Motorola Mobility LLC. Gesture has not served the Complaint in Civil Case No. 6:21-cv-00122-ADA on Lenovo Group Ltd.

II. SUMMARY OF THE ASSERTED PATENTS

The asserted patents relate to using cameras and/or gestures detected by the cameras or other sensors to control functions in a device for different applications.

For instance, the '949 patent is directed to automating the process of taking a picture by analyzing a scene and capturing an image when “certain poses of objects, sequences of poses, motions of objects, or any other states or relationships of objects are represented.” Dkt. 37-4 (“'949 patent”) at 1:50-2:8. The patent describes a number of different scenarios that, when detected, cause the camera to capture an image. The asserted claims, however, are directed only to one of those scenarios—gestures. Each of the asserted claims requires detecting or determining that a “gesture has been performed” and controlling the device in response. The '949 patent contemplates multiple image sensors to accomplish its goal. For example, a “central camera . . . is for picture taking and has high resolution and color accuracy,” while “lower resolution” cameras “with little or no accurate color capability . . . are used to simply see object positions.” *Id.* at 5:1-6. Although the term is not used outside the claims, all asserted claims refer to the gesture-capturing sensor as an “electro-optical sensor.”

The '924 patent describes computer devices that “optically sens[e] human input” using one or more cameras, contemplating applications in a “variety of fields such as computing, gaming, medicine, and education.” Dkt. 37-2 (“'924 patent”) at 2:7-23. A number of scenarios are described in the patent, including multiple cameras mounted in a fixed display. *Id.* at 3:19-56. The asserted claims each require a handheld device containing two separate cameras that face in different directions such that they have distinct fields of view. *Id.* at claim 1 (claiming a “handheld device comprising . . . a first camera [and] a second camera . . . wherein the first and second cameras include non-overlapping fields of view”).

The '431 patent describes computer devices that “optically sens[e] human input” using one or more cameras, contemplating applications in a “variety of fields such as computing, gaming, medicine, and education.” Dkt. 37-1 (“'431 patent”) at 2:7-17. A number of scenarios are described in which a user and/or object held by a user are imaged in order to control a computer function, including multiple cameras mounted in a fixed display. The asserted claims, however, are limited to handheld devices that process imaging of a person (or an object held by a person) to control a function of the handheld device. *Id.* at 25:40-26:62.

The '079 patent generally describes computer input devices employing cameras and lights to observe points on the human body and optically sense human positions and/or orientations. Dkt. 37-3 (“'079 patent”) at 1:54-2:6.

III. DEFENDANTS’ CONSTRUCTIONS OF THE DISPUTED TERMS ARE CORRECT.

A. “adapted to”

Asserted Claims	Gesture’s Proposal	Defendants’ Proposal
’079 patent cls. 1, 11, 21; ’924 patent cls. 1, 3-5, 8, 10, 12, 14; ’949 patent cls. 1, 13	No construction	Plain and ordinary meaning, which is “designed to” in the context of a camera or sensor and “programmed to” in the context of a processor

The parties agree that the claim term “adapted to” should be given its plain and ordinary meaning, but the parties dispute what that plain and ordinary meaning is. The parties’ disagreement thus raises a dispute about claim scope that must be resolved. *See O2 Micro Int’l. Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1360-62 (Fed. Cir. 2008) (“A determination that a claim term “needs no construction” or has the “plain and ordinary meaning” may be inadequate when a term has more than one “ordinary” meaning or when reliance on a term’s “ordinary” meaning does not resolve the parties’ dispute . . . When the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve it.”).

The phrase “adapted to” can be used in claim drafting to mean different things depending on context. *See Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012). In the asserted patents, the claims are drafted such that the term “adapted to” should be construed as “designed to” in the context of a camera or sensor and “programmed to” in the context of a processor. In each of the asserted claims in which this term appears, the term “adapted to” refers to one of the following:

- a computer comprising a light source that is “adapted to” illuminate either a work volume ('079 patent cl. 1, 21) or a human body part ('079 patent cl. 11);
- a computer or processor that is “adapted to” perform a particular function ('924 patent cl. 1, 8, 10, 12, 14; '949 patent cl. 13);
- a camera that is “adapted to” acquire an image ('924 patent cl. 3, 4) or video (*id.* at cl. 5); or
- a sensor that is “adapted to” detect a gesture ('949 patent cl. 1, 13).

In each instance, the claimed computer, processor, camera, or sensor must perform the disclosed function, although they are capable of performing other functions and may even perform those functions incidentally. For example, the asserted claims of the '924 patent disclose a computer that is “adapted” to determine a position (cl. 8), recognize an object (cl. 10), determine a reference frame (cl. 12), or transmit information over an internet connection (cl. 14). These claim limitations disclose specific functions of the computer. Thus, as in *Aspex*, the term “adapted to” “is most naturally understood to mean that [the camera, sensor, and processor] are designed or configured to accomplish the specified objective.” *Aspex*, 672 F.3d at 1349; *see also In re Giannelli*, 739 F.3d 1375, 1379-80 (Fed. Cir. 2014) (construing “adapted to” as “designed or constructed to,” not “capable of”); *Barkan Wireless IP Holdings, L.P. v. Samsung Elecs. Co.*,

No. 2:18-cv-28-JRG, 2019 WL 497902, at *39-40 (E.D. Tex. Feb. 7, 2019) (“adapted to” means “configured to,” not “capable of”).

Furthermore, the patentee himself draws a distinction between functions that computers are “operable to” do, as opposed to what computers are “adapted to” do, indicating that “adapted to” should refer to a subset of functions that the computer can perform. *See, e.g.* ’924 patent at claims 6, 7; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (“Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.”). Thus, a camera or sensor is “designed to” perform a specific function, while a processor is “programmed to” perform a specific function. *See, e.g. Nevro Corp. v. Boston Sci. Corp.*, 955 F.3d 35, 42 (Fed. Cir. 2020) (construing “configured to” to mean “programmed to”).

Gesture does not explain why Defendants’ understanding of the plain and ordinary meaning of “adapted to” is incorrect or inconsistent with the claims. Instead, Gesture relies on three legal arguments that are wrong and contrary to law.

First, Gesture argues that this issue has already been decided by the Eastern District of Texas in *Profectus* and *Huawei/Samsung*. That is not correct. In *Profectus Tech. LLC v. Huawei Techs. Co., Ltd.*, No. 6:11-cv-474, 2014 WL 1575719 (E.D. Tex. Apr. 17, 2014), the court merely concluded that the claim term “a mountable picture frame adapted to digitally display at least one still image” is not ambiguous. *Id.* at *8 (emphasis added). And in *Gesture Tech. Partners, LLC v. Huawei Device Co. et al.*, No. 2:21-cv-40-JRG, 2021 WL 4760632 (E.D. Tex. Oct. 12, 2021), the court concluded that an express claim construction was not needed (contrary to *O2 Micro*), while rejecting both parties’ arguments. *Id.* at *29.

Second, Gesture argues that “adapted to” should have the same meaning across all the asserted patents regardless of the context in which it is used. Defendants do not contend that the term “adapted to” should be construed differently depending on the claim term with which it is associated, but rather that the plain and ordinary meaning of the term varies in accordance with its modifier, which is sometimes a camera or sensor and at other times is a computer or processor. *Compare* ’924 patent cl. 1 to cl. 3. Defendants’ position is that the same construction should be applied across all claims when referencing a camera or sensor, and similarly for claims that reference a processor. Gesture points to no authority that would prohibit the plain and ordinary meaning of a term from varying based on the different contexts in which it is used.

Third, Gesture claims that Federal Circuit law supports the notion that ““adapted to” does not mean ‘programmed to’ or ‘designed to.’” Gesture argues that in *Profectus*, Judge Schneider cited *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1322-23 (Fed. Cir. 2003) for the proposition that ““adapted to” does not mean ‘programmed to’ or ‘designed to.’” Op. Br. at 5. This is incorrect. Rather, in *Profectus* Judge Schneider cited *Omega* to support his rejection of a proposed negative limitation, which is not at issue here. *See Profectus*, 2014 WL 1575719, at *8. Gesture does not cite any Federal Circuit decisions that support its position. Therefore, the Court should adopt Defendants’ plain and ordinary meaning of “adapted to.”

B. “at least one of ... and ...”

Asserted Claims	Gesture’s Proposal	Defendants’ Proposal
’079 patent cls. 5, 21, 25, 28;	No construction	“at least one of ____ and at least one of ____”
’924 patent cls. 1, 6, 7, and 8;		
’949 patent cl. 7		

In each of the asserted claims, the term “at least one of ... and ...” refers to a series of categories. For example, in the ’924 patent, claims 1, 6, and 7 recite “at least one of the first camera output and the second camera output.” Defendants’ construction gives full effect to the

scope of the claims, requiring “at least one first camera output and at least one second camera output.” Gesture, in contrast, argues that the term is disjunctive, resulting in claim language that effectively recites “either the first camera output or the second camera output.” Gesture’s interpretation reads out the disputed claim language and replaces the word “and” with “or.”

Defendants’ construction is consistent with the Federal Circuit’s construction of similar terms. *See, e.g., SuperGuide Corp. v. DirecTV Enters.*, 358 F.3d 870, 886 (Fed. Cir. 2004). In *SuperGuide*, the Federal Circuit was tasked with determining whether the claim language “at least one of a desired program start time, a desired program end time, a desired program service, and a desired program type” was disjunctive (as Gesture argues) or conjunctive (as Defendants argue). *Id.* at 885-86 (emphasis added). The Court affirmed the district court’s construction of the term as conjunctive: “at least one of each desired criterion; that is, at least one of a desired program start time, a desired program end time, a desired program service and a desired program type.” *Id.* at 885. The Court reasoned that “[t]he phrase ‘at least one of’ precedes a series of categories of criteria, and the patentee used the term ‘and’ to separate the categories of criteria, which connotes a conjunctive list.” *Id.* at 886. The same reasoning applies here to require “at least one value for each category.” *Id.*

Gesture cites a series of non-binding, out-of-district cases for the proposition that in certain contexts, the word “and” can be construed in the disjunctive. Op. Br. at 6, 7. These decisions, however, are at odds with the Federal Circuit’s binding decision in *SuperGuide*. That case is directly on point and governs here. Notably, Gesture does not address that decision.

For these reasons, Defendants’ construction should be adopted.

C. “a computer implemented method” / “a computer apparatus”

Asserted Claims	Gesture’s Proposal	Defendants’ Proposal
’079 patent cls. 1, 11, 21	No construction	“a method implemented on a laptop or desktop computer” (limiting preamble) / “a laptop or desktop computer” (limiting preamble)

Gesture concedes that the preambles of claims 1, 11, and 21 of the ’079 patent are limiting. Op. Br. at 7. Thus, the only dispute is whether the term “a computer implemented method” / “a computer apparatus” refers to a computer—*i.e.*, a laptop or desktop computer (as Defendants propose)—or to a broader category of both computers *and* phones (as Gesture proposes).

The ’079 patent distinguishes between laptop and desktop computers on one hand and phones on the other hand. Each of Figures 1-7 reference “computers,” while Figures 1-3 specifically reference laptop computers. *See* 2:39 (Fig. 1), 4:14 (Fig. 2); 4:35-42 (Fig. 3). In the entire ’079 patent, phones are only referenced once in association with Figure 6, and more specifically with an embodiment of a provisional application that references “a basic hand held device and which is a phone, or a computer or a combination thereof.” *Id.* at 9:26-33. The patentee plainly distinguished between computers and phones. *See id.* at 1:60-61 (referring to a “personal computer”); 1:65 and 4:14 (referring to a “laptop computer”); 2:15, 2:22, and 2:39 (referring to “laptop or other computer”); and 9:25-32 (referring to a “phone”).

That distinction carried over to claims 1, 11, and 21, which recite computers, not phones. Different meanings are presumed to attach to different words, and Gesture presents no reasoned basis to erase the claimed distinction between computers and phones. *See, e.g., Chicago Bd. Options Exch., Inc. v. Int’l Sec. Exch., LLC*, 677 F.3d 1361, 1368-69 (Fed. Cir. 2012) (reversing construction of claim term that found that “store,” “apply,” and “contain” had similar meanings, and reasoning that “[t]he general presumption that different terms have different meanings

remains.”); *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1579 (Fed. Cir. 1996) (reversing ruling that a “pusher assembly” and a “pusher bar” have the same meaning). Significantly, the scope of the ’079 patent claims can only be understood in reference to a laptop or desktop computer, not a phone. A small handheld device such as a phone, for example, cannot have “a work volume above a light source” (’079 patent at 13:4 (claim 1); *id.* at 13:33 (claim 11)), if the device (and therefore the light source) can be oriented in any conceivable direction. The claims envision a device with a fixed light source that projects upward into a work volume above it, which only makes sense if the claims are referring to a computer that is placed on a horizontal surface such as a desk or the user’s lap.

Gesture contends that Defendants are rewriting the plain meaning of the terms without showing disclaimer or lexicography. Defendants are doing no such thing. The claims recite “computer” and that is the plain meaning Defendants are applying. The remaining claim language and the specification confirm that a “computer” in the context of these claims is a computer, not a phone. Gesture also argues that Defendants’ construction excludes a preferred embodiment. But there is nothing in the specification indicating that the one embodiment referencing a phone is a “preferred” embodiment. The patentee did not claim phones in claims 1, 11, and 21, and the scope of those claims should not be expanded in the way Gesture suggests.

D. “a computer means within said housing for analyzing said image to determine information concerning a position or movement of said object”

Asserted Claims	Gesture’s Proposal	Defendants’ Proposal
’431 patent cl. 7	No construction, and not governed by 35 U.S.C. § 112 ¶ 6.	Means-Plus-Function Term <u>Function:</u> “analyzing said image to determine information concerning a position or movement of said object” <u>Structure:</u> A computer programmed to (1) scan the pixel elements in a matrix array on which said

		<p>image is formed, and then calculate the centroid location “x,y” of a target on the object using the moment method disclosed in U.S. Patent No. 4,219,847 to Pinkney, as disclosed at 4:48-62; (2) add or subtract said image from prior images and identify movement blur, as disclosed at 6:64-7:14, 7:22-29; (3) obtain a time variant intensity change in said image from the detected output voltage from the signal conditioning of the camera means or by subtracting images and observing the difference due to such variation, as disclosed at 8:25-38; or (4) detect a change in color reflected from a diffractive, refractive, or interference based element on said object that reflects different colors during movement, as disclosed at 8:60-9:14.</p>
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The parties dispute whether this term, which recites the word “means,” is governed by § 112 ¶ 6, and they dispute whether the structure for analyzing an image to determine the position and movement of an object is limited to the algorithms disclosed in the specification, or whether the structure is merely a general purpose computer.

The word “means” in the “computer means” limitation “creates a rebuttable presumption that § 112, para. 6 applies.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015). That presumption can be overcome only if “the claim recites sufficient structure for performing the described functions in their entirety.” *TriMed, Inc. v. Stryker Corp.*, 514 F.3d 1256, 1259 (Fed. Cir. 2008). The claim here does not recite any structure for performing the function apart from the “computer” preamble. But a computer by itself, without additional software, is not a sufficient structure for analyzing an image to determine information concerning a position or movement of an object positioned by a user. Creusere Decl. ¶¶ 38-43; *see also T-Netix, Inc. v. Glob. Tel*Link Corp.*, No. 2:01-CV-189, 2003 WL 25782759, at *9 (E.D. Tex. Aug. 15, 2003) (“In order to perform the functions described, the computer must have software to become a functioning computer means.”). Significantly, during prosecution of a parent

application, the applicant argued at length that a “computer means” term was means-plus-function and called it “absurd” for the examiner to fail to treat it as such:

By making this last statement, the examiner has in effect refused to give any patentable weight to the ‘function’ part of the computer ‘means.’ Such is contrary to 35 USC § 112, 6th ¶, as well as various sections of the MPEP and long established case law. As well appreciated, § 112, 6th ¶ specifically authorizes the use of ‘means or step plus function’ limitations in a claim. And when such limitations are used, it would be absurd to then ignore the ‘function’ portion as ‘only representing intended use’ as the examiner has done with the present claims.

Huang Decl. Ex. 1 (App. No. 10/893,534 Apr. 24, 2008, Notice of Appeal) at 2; *see also* *id.* Ex. 2 (App. No. 10/893,534 Jan. 8, 2008, Final Rejection) at 2. As in the ’431 patent, the “computer means” in the parent application included functions for analyzing an image obtained by a camera to determine position and movement information. *Id.* Ex. 3 (App. No. 10/893,534, Oct. 29, 2007 Response), cl. 9.

Gesture does not dispute that a computer without special programming is insufficient structure for analyzing an image to determine the position or movement of an object. Rather, Gesture contends that “[t]he claimed function is ‘analyzing to determine,’” and argues that a computer can “analyze to determine.” Op. Br. at 9. This argument, however, conspicuously ignores the entirety of the disputed term. The function is not simply “analyzing to determine,” but rather is “analyzing an image to determine information concerning a position or movement of said object.” The underlined language is critical to the construction of the term. There is no intrinsic or extrinsic evidence supporting Gesture’s apparent position that a computer without special programming can analyze an image to determine the position or movement of an object. Thus, Gesture has not rebutted the presumption—“computer means” is a means-plus-function term. *See Catch Curve, Inc. v. Venali, Inc.*, No. CV 05-4820, 2007 WL 3308101, at *10 (C.D. Cal. May 11, 2007) (finding “computer means” to be means-plus-function); *Verizon Cal., Inc. v.*

Ronald A. Katz Tech. Licensing, L.P., 326 F. Supp. 2d 1060, 1101-02 (C.D. Cal. 2003) (same); *Brown v. Baylor Healthcare Sys.*, No. H-08-0372, 2009 WL 1011186, at *5-8 (S.D. Tex. Apr. 15, 2009) (finding “portable computer means” to be means-plus-function); *Custom Media Techs. LLC v. Comcast Cable Commc’ns LLC*, Nos. 13-1421, 13-1424, 2015 WL 4743671, at *7-8 (D. Del. Aug. 11, 2015) (finding “user computer means” to be means-plus-function).

Defendants’ proposed function for the term mirrors the claim language: “analyzing said image to determine information concerning a position or movement of said object.” Gesture opposes Defendants’ proposed function by incorrectly claiming that Defendants have “add[ed] the phrase ‘positioned by a user operating said object.’” Op. Br. at 11. It is entirely unclear to what Gesture is referring.² That language does not appear anywhere in Defendants’ proposed function. As Gesture later concedes, “[t]he function in the claim is ‘analyzing said image to determine information concerning a position or movement of an object,’ and nothing more.” *Id.* Thus, the Court should adopt Defendants’ proposed function.

As to structure, because the “computer means” term recites a computer-implemented function, the structure is limited to the algorithms disclosed in the specification and clearly linked to the function. *See Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1253 (Fed. Cir. 2005). Gesture argues that an exception from *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) applies because a general-purpose computer can “analyz[e] to determine.” The *Katz* exception does not apply because, as discussed above, analyzing an image to determine a position or movement of an object positioned by a user cannot be performed by a

² At various places in its opening brief, Gesture attacks claim constructions that Defendants in this case have not proposed. It appears that Gesture may be confusing Defendants’ claim constructions here with positions that different defendants took in actions Gesture filed in the Eastern District of Texas.

general purpose computer without special programming. Creusere Decl. ¶¶ 38-43; *In re Katz*, 639 F.3d at 1316 (algorithm not required only where a computer can perform the claimed functions “without special programming”). An algorithm is required for structure here, and only Defendants’ proposal properly limits the structure to the disclosed algorithms. ’431 patent at 4:48-62, 6:64-7:14, 7:22-29, 8:25-38, 8:60-9:14; Creusere Decl. ¶¶ 44-49.

Although the patent discloses multiple ways of scanning, or interrogating, the pixels in an image, it only discloses one algorithm for calculating the position of an object from those scanned pixels, and three algorithms for calculating the movement of an object from those scanned pixels. The ’431 patent discloses that the position of an object can be calculated from an image by using the moment method disclosed in the Pinkney patent (U.S. Patent No. 4,219,847) to calculate the centroid location of the object:

As an illustration, computer 220 determines, after the array 205 has been interrogated, that the centroid “x, y” of the pixel elements on which the target image lies is at pixel x=500, y=300 (including a sub-fraction thereof in many cases). The centroid location can be determined for example by the moment method disclosed in the Pinkney patent, referenced above.

’431 patent at 4:56-62. The ’431 patent then discloses three algorithms for determining information concerning the movement of an object positioned by a user. The first is to add or subtract pixel intensities of successive images and then to identify a blur in the image, the blur representing movement of the object. *Id.* at 6:64-7:29. The second is to detect a time variant intensity change in the image as the object moves its position by subtracting images and observing the difference due to such variation for objects that “twinkle” as they move. *Id.* at 8:4-38. The third is to detect a change in color reflected from a diffractive, refractive, or interference based element on the object that reflects different colors during movement, such that a change in color represents movement. *Id.* at 8:60-9:14. Contrary to Gesture’s claim, the algorithms

Defendants identified are plainly directed to the claimed function, not to image capture. '431 patent at 4:48-62, 6:64-7:14, 7:22-29, 8:25-38, 8:60-9:14; Creusere Decl. ¶¶ 44-49. If Gesture's characterization of these algorithms were correct, there would be no structure clearly linked to the function at all, thereby rendering the term indefinite.

E. "means for controlling a function of said apparatus using said information"

Asserted Claims	Gesture's Proposal	Defendants' Proposal
'431 patent cl. 7	<p><u>Function</u>: "controlling a function of a handheld computer apparatus using information concerning a position or movement of at least one object positioned by a user operating said object"</p> <p><u>Structure</u>: "a control system programmed to control a function based on information concerning a position or movement of said object; and equivalents thereof"</p>	<p><u>Function</u>: "controlling a function of a handheld computer apparatus using information concerning a position or movement of at least one object positioned by a user operating said object"</p> <p><u>Structure</u>: Indefinite</p>

The parties agree that "means for controlling" is a means-plus-function limitation.

Gesture confusingly attacks Defendants' proposed function: "Defendants' recited function is improper." Op. Br. at 14. But the parties propose the same function for this term. Thus, there is no dispute as to the function for this means-plus-function term. The only dispute here is with respect to the corresponding structure.

A means-plus-function claim is indefinite if the specification fails to disclose adequate corresponding structure to perform the claimed function. *Williamson*, 792 F.3d at 1351-52. The "means for controlling" term recites a computer-implemented function, and thus the structure is limited to the algorithms disclosed and clearly linked to the function in the specification. *Harris Corp.*, 417 F.3d at 1253. The specification, however, does not link any algorithm to the agreed-upon function. Gesture proposes that the structure is "a control system programmed to control a function based on information concerning a position or movement of said object; and equivalents

thereof.” This proposed structure is circular, merely parroting the language of the agreed-upon function, which would essentially eviscerate the requirement that a structure be identified.

Gesture’s proposal should also be rejected because the ’431 patent does not clearly link Gesture’s proposed structure to the claimed function. The patent refers to a “control system” in only two ways: (1) generically when disclosing that the potential for target acquisition in a millisecond or two using pixel addressable CMOS cameras “has major ramifications for the robustness of control systems built on such camera based acquisition, be they for controlling displays, or machines or whatever,” and (2) in the Figure 17B embodiment that discloses using a control system to position a robot for 3D acoustic imaging. ’431 patent at 5:50-60, 25:5-35. Neither instance comes anywhere close to a disclosure of using a control system to control a function of a handheld device using position or movement information of an object positioned by a user. Creusere Decl. ¶¶ 51-57; *see B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1425 (Fed. Cir. 1997) (“Although Fig. 3 of the patent shows a valve seat, neither the specification nor the prosecution history contains any indication that the valve seat structure corresponds to the recited function, *i.e.*, that it holds the flexible disc against the triangular member so as to restrain sideways movement.”). Moreover, Gesture’s proposal is not limited to a particular algorithm as required for computer-implemented functions, and the patent does not disclose any algorithm for performing the claimed function. Creusere Decl. ¶ 58.

Thus, because the ’431 patent does not disclose an algorithm for performing the claimed function, the “means for controlling” limitation is indefinite. *Williamson*, 792 F.3d at 1351-52.

F. “oriented to view [a user / an object other than the user]”

Asserted Claims	Gesture’s Proposal	Defendants’ Proposal
’924 patent cl. 1	No construction	Indefinite

The Federal Circuit has held that an apparatus claim requiring a user to use the apparatus is indefinite. *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005) (“[I]t is unclear whether infringement of [the claim] occurs when one creates a system that allows [a] user to [use an input means], or whether infringement occurs when the user actually uses the input means”); *see also In re Katz* , 639 F.3d at 1318 (finding “interface means for providing automated voice messages . . . to certain of said individual callers, wherein said certain of said individual callers digitally enter data” indefinite); *H-W Tech., L.C. v. Overstock.com, Inc.*, 758 F.3d 1329, 1335 (Fed. Cir. 2014) (finding “wherein said user completes a transaction” and “wherein said user selects one of said variety of offers” indefinite).

Claim 1 of the ’924 patent is an apparatus claim with limitations requiring a method of using the claimed device. Claim 1 recites a “handheld device” comprising “a first camera oriented to view a user of the handheld device” and “a second camera oriented to view an object other than the user of the device.” (Emphasis added.) The orientations of the first and second cameras are described in relation to the user, as opposed to another component in the device. Whether the camera is oriented to view a user cannot be determined until a user actually uses the device in a particular way. If the user faces a camera on the device towards herself, the “first camera” is oriented to view the user. But if the user rotates or flips the device such that no camera is facing the user, the “first camera” limitation is not met because the camera is not oriented to view the user. The fact that the same device may satisfy the first camera’s orientation requirement in some use cases but not others, depending from moment to moment or how the user chooses to hold and direct the device, shows that infringement requires user action.

That the '924 patent orientation limitations require method steps, and not just structural capability, is further understood from the contrast with claim 11 of the related '079 patent, which claims the orientation of a camera as a structural feature rather than one that requires a particular use by a user. Specifically, claim 11 of the '079 patent recites a camera oriented to observe a gesture in a work volume defined as "generally above" a light source with which the camera is "in fixed relation." Unlike claim 1 of the '924 patent, the orientation of the camera in claim 11 of the '079 patent is described in relation to other components. The orientation as recited in claim 11 of the '079 patent is thus a structural feature that does not require user action. This contrasts with the orientation recited in claim 1 of the '924 patent ("oriented to view a user") that requires a user to use the claimed device in a particular way.

Similar claims have been found indefinite under *IPXL*. For instance, in *Ultimate Pointer, L.L.C. v. Nintendo Co.*, No. 6:11-cv-496-LED, 2013 WL 2325118, at *22-23 (E.D. Tex. May 28, 2013), the court found that a claim for "a pointing device for controlling a feature on an image generated by a computer" was indefinite under *IPXL* for "requir[ing] the user to direct the handheld enclosure between two points, effectively requiring the user to use the pointing device." The claim at issue recited "a sensing device for generating first data indicative of a first spatial state of said enclosure while the pointing line is directed at a first calibration point, said first calibration point having a predetermined relation to the image, and for generating second data indicative of a second spatial state of said enclosure while the pointing line is directed at a non-calibration point on the image" and controlling the image "based on the relation between the first spatial state and the second spatial state." *Id.* at *22 (emphasis added). The defendant argued that a user had to use the pointing device for the sensing device to generate data "while the pointing line is directed at a ... calibration point," and thus the claim was indefinite. *Id.* The

plaintiff argued that the claim merely recited the capability to generate data indicative of spatial states while the pointing line is directed at certain points. *Id.* The court agreed with the defendant that “[t]he clause at issue does not define the function of the sensing device,” which was “simply to generate data indicative of the spatial state of the handheld enclosure.” *Id.* at *23. Since the claim recited controlling a feature based on the relation between the two spatial states and “[t]he relation between the spatial states depends on data generated ‘while the pointing line is directed at a ... calibration point,’” the claim “requires the user to direct the handheld enclosure between two points, effectively requiring the user to use the pointing device,” and was therefore indefinite under *IPXL*. *Id.* The claim invalidated in *Ultimate Pointer* is on all fours with the claim at issue here.³

Claim 1 of the '924 patent thus impermissibly mixes an apparatus and a method of using the apparatus, just as in *IPXL*, such that the claim is indefinite. *IPXL*, 430 F.3d at 1384.

G. “the detected gesture is identified by the processing unit apart from a plurality of gestures”

Asserted Claims	Gesture’s Proposal	Defendants’ Proposal
'949 patent cl. 13	No construction	Plain and ordinary meaning, wherein the plurality of gestures are identified by the processing unit

Claim 13 recites that “the detected gesture is identified by the processing unit apart from a plurality of gestures.” '949 patent at 16:35-39. The plain language of the claim dictates that the processing unit must distinguish one gesture “apart from” a plurality of other gestures that it also identifies. *See id.*; Creusere Decl. ¶¶ 59-64. If the processing unit were not required to

³ While the court in *Ultimate Pointer* found other claims not invalid under *IPXL*, those claims resemble claim 11 of the '079 patent in reciting structural capability; none of those claims recite a user-dictated orientation like claim 1 of the '924 patent.

identify all of the gestures—both the detected gestures and the additional plurality of gestures—the language “apart from a plurality of gestures” would be superfluous.

Gesture argues that “the claim requires only that the processing unit be adapted to detect and identify one of the gestures amongst that plurality” of gestures that the sensor and digital camera view. Op. Br. at 20 (emphasis added). But Gesture does not explain how it is that the processing unit can identify a detected gesture among a plurality of gestures if it is not also identifying those other plurality of gestures. *See Creusere Decl.* ¶¶ 59-64. Under Gesture’s reading of the claim term, all that would be required is that “the detected gesture is identified by the processing unit,” improperly reading the words “apart from a plurality of gestures” out of the claim. *See Akzo Nobel Coatings, Inc. v. Dow Chem. Co.*, 811 F.3d 1334, 1339-40 (Fed. Cir. 2016) (“[W]e agree with the district court that adopting Akzo’s proffered construction of ‘gather or receive’ would ‘obviate[] the import of the word ‘collection.’’’’); *Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.”); *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1410 (Fed. Cir. 2004) (“[I]nterpretations that render some portion of the claim language superfluous are disfavored.”). The only plain meaning of the disputed term that gives full effect to all of the words in the claim is one in which the plurality of gestures are identified by the processing unit. For that reason, the Court should adopt Defendants’ construction.

H. “forward facing [portion / light source]”

Asserted Claims	Gesture’s Proposal	Defendants’ Proposal
’949 patent cls. 1, 5, 8, 13, 16	No construction	Indefinite

A patent claim is indefinite if it fails to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898,

910 (2014). The terms “forward facing [portion / light source]” are indefinite because they fail to provide a person of ordinary skill in the art with reasonable certainty of the position or direction of the “forward facing [portion/light source].” Claim 1 of the ’949 patent, for example, discloses “a forward facing portion” of a device housing that encompasses an electro-optical sensor having a field of view and a digital camera. But “forward facing” is a relative term that provides no guidance as to where the electro-optical sensor and digital camera must be housed. Creusere Decl. ¶¶ 65-70.

Gesture argues that the “forward facing” terms merely refer “to a certain side of the claimed apparatus.” Op. Br. at 21. While this may be true, it does not resolve the ambiguity. Gesture does not and cannot explain how one would determine which “certain side” is “forward facing.” For example, many of the smartphones on the market today (including those of Defendants) have two sets of cameras (and sensors) that point in opposite directions—one set with a field of view in the same direction as the user if the user is looking at the smartphone screen, and the other field of view in the opposite direction. For these devices, it is impossible to determine which cameras and/or sensors are in the “forward facing” portion of the device. Adding to the confusion, devices (including certain accused products) may be “foldable” where a portion of the device housing that was facing one side later faces another side after the device is folded or unfolded. It is unclear what would be the “forward facing” portion of such devices. The intrinsic evidence does not help, as the specification never uses “forward facing,” and there is no discussion in the prosecution history. This ambiguity is only confirmed by Gesture’s infringement contentions, which allege that both sides of the accused products are the “forward facing portion”—a position that is contrary to Gesture’s acknowledgement here that the term refers to “a certain side.” *See* Creusere Decl. ¶¶ 65-70. Without any guidance as to which side

of the claimed device is “forward facing,” these terms are indefinite.

IV. CONCLUSION

For the reasons set forth above, Defendants respectfully request that the Court adopt Defendants’ constructions of the disputed claim terms.

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Respectfully submitted,

/s/ John M. Guaragna

John M. Guaragna
Texas Bar No 24043308
DLA PIPER LLP (US)
401 Congress Avenue, Suite 2500
Austin, TX 78701-3799
Tel: 512.457.7125
Fax: 512.457.7001
john.guaragna@dlapiper.com

Sean Cunningham (*pro hac vice*)
Catherine Huang (*pro hac vice*)
DLA Piper LLP (US)
401 B Street, Suite 1700
San Diego, CA 92101-4297
Tel: 619-699-2700
Fax: 619-699-2701
sean.cunningham@us.dlapiper.com
catherine.huang@us.dlapiper.com

Michael D. Jay (*pro hac vice*)
DLA Piper LLP (US)
2000 Avenue of the Stars, Suite 400
North Tower
Los Angeles, CA 90067
Tel: 310-595-3000
Fax: 310-595-3300
michael.jay@us.dlapiper.com

Christopher Deck (*pro hac vice*)
DLA Piper LLP (US)
33 Arch Street, 26th Floor
Boston, MA 02110-1447
Tel: 617.406.6000
Fax: 617.406.6100

ATTORNEYS FOR DEFENDANT APPLE INC.

CERTIFICATE OF SERVICE

I certify that the foregoing document was filed electronically on December 21, 2021, pursuant to Local Rule CV-5(a) and has been served on all counsel who have consented to electronic service via electronic mail. Any other counsel of record will be served by first class U.S. mail on this same date.

/s/ John M. Guaragna

John M. Guaragna